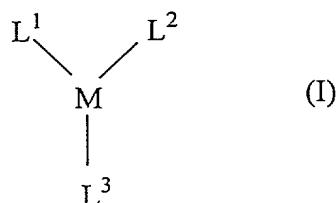


Abstract

The present invention provides a process for efficiently obtaining polyethers having its high degree of polymerization by easily polymerizing substituted epoxides which could hardly or could not be made so far to provide a high degree of polymerization. That is, a polyether is obtained by a process which comprises ring-opening-polymerizing at least one substituted epoxide, except for propylene oxide and epihalohydrin, in the presence of a rare earth metal compound represented by the formula (I) and a reducing compound:



Wherein M represents a rare earth element selected from Sc, Y and lanthanide, and L¹, L² and L³ are same as or different from each other and each of them represents an oxygen-binding ligand.